



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Online Balint groups in healthcare workers caring for the COVID-19 patients in Iran



In December 2019 a pneumonia outbreak by the novel coronavirus, SARS-CoV-2, occurred in Wuhan City, China (Riou and Althaus, 2020). The disease was named COVID-19, a new respiratory disease that is spreading widely throughout the world (Sohrabi et al., 2020).

As of March 1st 2020, Iran has reported 987 COVID-19 cases, including 54 associated deaths which are increasing day by day (Zhuang et al., 2020). Healthcare workers including physicians and nurses are overwhelmed and show signs of psychological distress (Chen et al., 2020). The mental health of medical staff needs special attention. We believe that in addition to physical protection during this pandemic, Balint groups help healthcare workers to better cope with psychosocial stressors in a supporting and accepting group atmosphere for the purpose of improving participants' insight to their experience and group learning of a more skillful management of doctor-patient relationships (Haude, 2020). Attending a Balint group in person would be difficult during these times due to social distancing and high infection rates. Instead members would prefer attending Balint groups online.

Participants were recruited via message invitations on Telegram and Instagram and up to six groups were formed. Each group had 8 to 12 participants. In each group, participants convened for 1 hour per session, 2-3 times a week via Skype for 6-8 sessions.

Typically in a Balint group one of the participant's volunteers at the beginning of each session to talk about a patient whom s/he has been struggling with lately. The problem may be that the patient has been emotionally disturbing, just difficult to understand, or the doctor has difficulty engaging in treatment. The group listens to the story without interrupting. Others are welcome to ask questions for further clarification when the presenter is finished (e.g.: how old is the patient?). then the leader asks the presenter to 'sit back' i.e. to push her/his chair back a little (in Skype groups just turn off the microphone) and remain silent for the next 15-20 minutes (Otten, 2017). the leader invites the group to respond to what they have heard. Responses take various forms. The members take a reflective approach and as a result there may be more questions, advice, emotional reactions induced by the patient's story and speculations about what else might be going on. The group leader will gently discourage too much interrogation of the presenter, as the aim is to get the group members themselves to work on the case. After 15-20 minutes the presenter comes back to the group and can choose to talk about her/his feelings and thoughts, if s/he wants. The group members, including the presenter, can continue processing till the end of the session, in case there is extra time left (Otten, 2017).

The leader of the group is Mansoureh Kiani Dehkordi, psychiatrist, enrolled in psychotherapy fellowship at Tehran University of Medical Science, translator of *Balint groups: Theory and Practice*, leading Balint groups under Dr. Shahin Sakhi's supervision, psychiatrist and consultant therapist, and Najmeh Shahini, Assistant Professor of psychiatry as a co-leader with the assistance of two psychologist co-leaders,

Mohammad Azizpoor, and Shakiba Gholamzad, who attend the groups most often.

Online Balint groups were formed because of an emergent situation. We had no other choice to form Balint groups other than doing it online. This unique evolutionary experience, which is showing an effective outcome deserves to be studied for its benefits and possible limitations.

We designed a study to evaluate the impact of online Balint groups on healthcare workers caring for the COVID-19 patients. Below, we report the results of a mixed-methods approach, including a pre-post with Corona Disease Anxiety Scale (CDAS) and Connor-Davidson Resilience Scale (CD-RISC) questionnaire controlled trial and thematic analysis of qualitative data.

The results of the pilot study in 10 healthcare workers (mean age 34.70 ± 6.07) show that the mean CDAS score before the group work sessions was 35.80 ± 5.09 and post study was 9.7 ± 2.75 . These changes were statistically significant (p value ≤ 0.001). Also, the mean CD-RISC scores before and after the group work sessions were, respectively, 22.80 ± 8.51 and 75.60 ± 6.63 . These changes were also statistically significant (p value ≤ 0.001). Table 1. Also the results of Wilcoxon test showed a significant difference between pretest and posttest for CDAS and CD-RISC scales p value: 0.005

Members of the other 5 groups have expressed satisfaction and willingness to participate in future groups and have been promoting Balint group work among their colleagues. The satisfactory result of online Balint groups has motivated us to continue this work and to further research its efficacy, unique benefits and possible limitations.

Therefore, we are continuing to hold Balint group sessions for all healthcare groups (physician, nurses, paramedics, psychologists, etc.) and the results of the studies will be reported.

It is our hope that, through expanding our online Balint groups for health care workers, we will be able to prevent burnout and related physical and psychological consequences.

Declaration of Competing Interest

All authors declared there was no conflict of interest

Acknowledgements

Deep thanks to Dr. Ray Brown from Bristol, whom I experienced Balint groups for the first through his teachings. I would also like to thank Tehran University of Medical Sciences Psychotherapy Department, Dr. Mohammad Sanati scientific secretary of the Iranian branch of WADP and Dr. Mahdieh Moinalghorabaei for holding 'Balint days' for the first time in the department.

Table 1
mean \pm SD of variable

P value	Post-test	Pre-test	
≤ 0.001	9.7 ± 2.75	35.80 ± 5.09	CDAS
≤ 0.001	75.60 ± 6.63	22.80 ± 8.51	CD-RISC

References

- ...Chen, Q., Liang, M., Li, Y., Guo, J., Fei, D., Wang, L., Li, X., 2020. Mental health care for medical staff in China during the COVID-19 outbreak. *The Lancet Psychiatry*.
- Haude, V., 2020. Intercultural Balint Work. *Intercultural Psychotherapy*. Springer, pp. 151–160.
- Otten, H., 2017. *The Theory and Practice of Balint Group Work: Analyzing Professional Relationships*. Routledge.
- Riou, J., Althaus, C.L., 2020. Pattern of early human-to-human transmission of Wuhan 2019 novel coronavirus (2019-nCoV), December 2019 to January 2020. *Eurosurveillance* 25 (4).
- ...Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., Agha, R., 2020.

World Health Organization declares global emergency: a review of the 2019 novel coronavirus (COVID-19). *Int. J. Surg.*

Zhuang, Z., Zhao, S., Lin, Q., Cao, P., Lou, Y., Yang, L., He, D., 2020. Preliminary estimation of the novel coronavirus disease (COVID-19) cases in Iran: a modelling analysis based on overseas cases and air travel data. *Int. J. Infect. Dis.*

Mansoureh Kiani Dehkordi^a, Shahin Sakhi^b, Shakiba Gholamzad^c,
Mohammad Azizpour^d, Najmeh Shahini^{e,*}

^a *Department of Psychiatry, Psychosis Research Center, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran*

^b *Psychiatrist, Clinical faculty, Department of Psychiatry, UCLA Semel Institute for Neuroscience and Behavior, Los Angeles, California, USA*

^c *MA in health psychology, Student Research Committee, Iran University Of Medical Sciences, Tehran, Iran*

^d *MA in clinical psychology, Tehran Azad University, Tehran, Iran*

^e *Assistant Professor of Psychiatry, Golestan Research Center of Psychiatry (GRCP), Golestan University of Medical Sciences, Gorgan, Iran*
E-mail address: drshahini.n@goums.ac.ir (N. Shahini).

* Corresponding author at: Assistant Professor of Psychiatry, Golestan Research Center of Psychiatry (GRCP), Golestan University of Medical Sciences, Gorgan, Iran.